646 F.2d 527 209 U.S.P.Q. 554 (Cite as: 646 F.2d 527)

United States Court of Customs and Patent Appeals.

In re John H. Wertheim and Abraham Rudolph Mishkin.

Appeal No. 80-603.

April 9, 1981.

Applicant for patent serial No. 96,285, with respect to process for making freeze dried instant coffee appealed from decision of the Patent and Trademark Office Board of Appeals affirming rejection of all claims in application. The Court of Customs and Patent Appeals, Rich, J., 541 F.2d 257, affirmed in part and reversed in part. After remand, an appeal was taken from decision of the Patent and Trademark Office Board of Appeals, which affirmed final rejection of claims 37, 38, and 44. The Court of Customs and Patent Appeals, Rich, J., held that Board improperly affirmed final rejection of such claims as prior art and on grounds of obviousness, in that patent disclosure used in present rejection was not effective as a reference as of filing date of first in series of applications resulting in patent, since first in series did not disclose a patentable invention and subsequent applications added new material, so that filing date of prior patent did not antedate pending application.

Reversed.

West Headnotes

[1] Patents € 16(1) 291k16(1) Most Cited Cases (Formerly 291k18)

[1] Patents € → 90(1) 291k90(1) Most Cited Cases

Rejection pursuant to sections governing obviousness in view of prior art and benefit of earlier filing date is one utilized where first section alone may fail because not every material limitation of claimed invention is disclosed in the reference; that reference, referred to as "prior art" in second section, may be combined with another to support an obviousness rejection. 35

U.S.C.A. §§ 102(e), 103.

[2] Patents € 61
291k61 Most Cited Cases

An abandoned patent application by itself can never be a reference.

[3] Patents € 16(1) 291k16(1) Most Cited Cases (Formerly 291k18)

In every case, "the invention" referred to in section governing obviousness in view of prior art is nothing more or less than subject matter being claimed by the appellant, which was the starting point of all inquiry about obviousness. 35 U.S.C.A. § 103.

[4] Patents € 109 291k109 Most Cited Cases

Type of new matter added by continuation-in-part application must be inquired into, if it is critical to patentability of claimed invention, a patent could not have issued on the earlier filed application and the theory that but for delays in Patent Office, patent would have earlier issued and would have been prior art known to the public has no application.

[5] Patents € 91(1) 291k91(1) Most Cited Cases

If the Patent and Trademark Office wished to utilize against an applicant a part of the patent disclosure found in an application filed earlier than the date of the application which became a patent, it must demonstrate that the earlier filed application contains support from sections governing specification and benefit of earlier filing date for the invention claimed in reference patent; where the patent could not theoretically have issued the day application was filed, it is not entitled to be used against another as "secret prior art." 35 U.S.C.A. §§ 112, 120.

[6] Patents € 16.30 291k16.30 Most Cited Cases (Formerly 291k18)

Patent and Trademark Office Board of Appeals improperly affirmed final rejection of claims relating to

process for making freeze dried instant coffee, pursuant to sections governing obviousness in view of prior art and benefits of earlier filing date, in that patent disclosure used in present rejection was not effective as a reference as the filing date of the first in a series of applications, since first in series did not disclose the claimed invention and subsequent applications added new matter, and thus reference did not antedate applicant's alleged actual reduction to practice and could not be combined with another reference to support a rejection for obviousness. 35 U.S.C.A. §§ 102(e), 103.

[7] Patents € 90(1) 291k90(1) Most Cited Cases

Continuation in part application is entitled to filing of parent application as to all subject matter carried over into it from the parent application for purposes of utilizing the patent disclosure as evidence to defeat another's right to a patent if application, the filing date of which is needed to make a rejection, discloses, pursuant to sections governing specification and benefit of earlier filing date, the invention claimed in the reference patent. 35 U.S.C.A. §§ 112, 120.

Patents €=328(2) 291k328(2) Most Cited Cases

3,482,990. Cited as a reference.

*528 William H. Vogt, III, Morris N. Reinisch, Dennis P. Tramaloni, and Marcus J. Millet, New York City, for appellants.

Joseph F. Nakamura, Sol., Gerald H. Bjorge, Associate Sol., Washington, D. C., for Patent and Trademark Office.

Before MARKEY, Chief Judge, and RICH, BALDWIN, MILLER and NIES, Judges.

RICH, Judge.

This appeal is from the decision of the Patent and Trademark Office (PTO) Board of Appeals (board) affirming the final rejection under 35 U.S.C. s 103 of claims 37, 38, and 44 in application serial No. 96,285, filed by Wertheim and Mishkin (Wertheim) December 8, 1970, entitled "Drying Method." We reverse.

At the outset, we note the prolonged, if not tortuous,

prosecution of the present application. During the past decade, this application has appeared before us once before, In re Wertheim, 541 F.2d 257, 191 USPO 90 (1976) (Wertheim I), and has been involved in an aborted interference, No. 99,688, with a reference patent used in the instant rejection, United States Patent No. 3,482,990 to Pfluger. Only two of the original forty-three claims are now before us, dependent claims 37 and 38, original claim 2 having been rewritten as independent claim 44, the principal claim on appeal.

The Invention

While the present and related inventions were described in Wertheim I, we give a synopsis of the claimed process, which is for freeze-drying coffee extract. Hot water is percolated through roasted and ground coffee beans to produce an aqueous coffee extract. After concentrating the extract to a point where its solids content is between 35% and 60%, it is charged with a gas to yield a foam. The pressure of the foam environment is regulated to be at least atmospheric pressure so as to avoid evaporative cooling, i. e., thermal loss resulting from vaporization of the aqueous portion of the extract. In the preferred embodiment of claim 37, the foam density is maintained between 0.4 grams per cubic centimeter (gm/cc) and 0.8 gm/cc. Finally, the foam is frozen at the regulated pressure and freeze-dried in a conventional manner. During these "cold" steps, the foam temperature allegedly must be maintained below the eutectic temperature of the extract, i. e., the lowest possible constant- melting point of the mixture to avoid the loss of flavoring compounds through evaporation.

Applications and References

Since both appellants' case and the effective date of one of the references depend on earlier filing dates, we provide the chronological *529 table below prior to discussing the reference disclosures and the rejection.

Date 	References	Appellants
1949	Flosdorf	
March 24, 1961	Pfluger I filed (Ser. No. 98,007)	
July 24, 1963		Alleged actual reduction to practice by Wertheim
August 1963	Sivetz	
September 17, 1963	Pfluger II filed (Ser. No. 309,410)	
April 2, 1965		Swiss filing by Wertheim
January 13, 1966	Pfluger III filed (Ser. No. 520,347)	
March 28, 1966		Wertheim A filed
		(Ser. No. 537,679)
February 10, 1969	Pfluger IV filed (Ser. No. 800,353)	
December 9, 1969	Pfluger Patent issued	
December 8, 1970	(No. 3,482,990)	Wertheim B filed (Ser. No. 96,285, on appeal)

The References

The primary reference, cited by the examiner under 35 U.S.C. s 102(e), is the Pfluger patent which issued on the last of a series of four applications, as shown above. The patent discloses a foam/freeze-dried coffee process for retaining volatile aromatics during the foaming and freezing steps. Improved retention of these compounds is supposedly achieved by avoiding evaporative cooling of a concentrated coffee extract. The Pfluger patent, like appellants' application, calls for maintaining the foam below its eutectic temperature. Claim 2 of the Pfluger patent was copied by appellants for interference purposes and is claim 44 on appeal.

The Pfluger application chain developed as follows: Pfluger IV was designated a continuation of Pfluger III, [FN1] which was designated a continuation-in- part (CIP) of Pfluger II, which was designated a CIP of Pfluger I.

<u>FN1.</u> Pfluger III received a notice of allowance but did not issue. Instead, Pfluger filed a continuation, Pfluger IV.

Pfluger I did not support all of the limitations of the claims copied from the Pfluger patent. Specifically, it did not disclose concentrating the extract to a solids content of between 35% and 60% prior to foaming. Express disclosure of this limitation did not occur until Pfluger III. It also did not expressly disclose always creating the foamed extract at at least atmospheric pressure, a limitation first found in Pfluger II.

The Sivetz publication is a secondary reference which discloses a non-foamed, freeze-dried coffee process. The vacuum drying of this process results in flaked coffee. The alleged advantage of this type of instant coffee is its excellent solubility in water. However, Sivetz states that "even under ideal freeze-drying conditions, the volatiles of coffee aroma and flavor are not retained any better, if as well, as in spray drying." It goes on to recommend less than 60% water content, and therefore a greater than 40% solids content, in any extract to be freeze-dried.

Flosdorf is an earlier publication also disclosing freeze-drying methods. It states that for economic reasons, one must produce freeze-dried coffee from extracts containing 40% to 50% solids.

The Rejection

In Wertheim I, this court held that interference claims 2 (now 44), 37, and 38 of appellants' still pending application were entitled to the benefit of the Swiss Wertheim application. Approximately eleven months later the PTO declared Interference No. 99,688 between the present application and the Pfluger patent. Appellants were designated senior party because of their Swiss filing date. Pfluger was made junior party.

After considering four motions by Pfluger, the Primary Examiner moved sua sponte to dissolve the interference and granted his own motion. In support of his decision, he stated that the claims copied by Wertheim were unpatentable under 35 U.S.C. s 102(e) and/or 35 U.S.C. s 103 over the Pfluger I and II disclosure in view of Sivetz.

Ex parte prosecution was resumed and the claims on appeal were rejected. The *530 great-grandparent of the Pfluger patent, Pfluger I, was said to be "carried forward" into the patent. The missing limitation in Pfluger I was supposedly found in Sivetz. Essentially, the rejection was based on, and was a modification of, the grounds stated in the dissolution decision. Appeal was then taken to the board.

After admitting in his Answer that the 1961 Pfluger application "fails to set forth specifically the values of the solids content within the range set forth in the

Wertheim claims (35 to 60%)," the examiner said:

The question which must be considered and answered is what one with ordinary skill in the art would derive from the following teaching on page 3 of the 1961 Pfluger application:

In many applications such foaming can be considerably increased by concentrating the solution or suspension to a relatively high solids content prior to incorporation of air or other gas such as nitrogen therein by whipping.

The answer to the question presented is that it would be prima facie obvious to those with the ordinary skill in the art (to) which the subject matter relates to preconcentrate to the values set forth in the Wertheim claims. This conclusion is reached by the following reasoning.

A patent specification is directed to those skilled in the art. Clearly, the data in the 1961 disclosure is not limited to the specific values set forth in the examples. The 1961 Pfluger disclosure teaches "concentrating * * * to a relatively high solids content" (page 3). When this teaching is viewed in the context of what is known in the art in the time frame of the instant subject matter, it would involve no more than ordinary skill of one in the art to preconcentrate to the value claimed.

As set forth previously, the record of Wertheim establishes that freeze drying is a well known procedure. Because it is expensive, it is economically advantageous to pre-concentrate prior to freeze drying. Sivetz et al cited above, amplify on this (page 506 in particular). Sivetz et al point out that freeze drying is much more expensive than spray drying. Sivetz et al also point out that (page 506 last two sentences):

In freeze and belt vacuum drying, water content should be less than 60 percent. This reduces water evaporation load and drying cost.

Accordingly when the Pfluger patent is read in light of the 1961 application disclosure, whose date patentees are entitled to for benefit of filing date, taken with Sivetz et al, it would be obvious to the ordinary worker in the art to pre-concentrate to the value set forth in the claims.

The Board

The board reversed the rejection on \underline{s} 102(e) alone, but affirmed the \underline{ss} 102(e)/103 rejection. In doing so, it stated that the "Pfluger disclosure" was available as a reference under 35 U.S.C. \underline{s} 102(e). Yet, the \underline{s} 102(e) rejection was disapproved because not every material element in the appealed claims was disclosed in what the board called the "principal reference."

In awarding the Pfluger patent the benefit of the Pfluger I filing date, the board found "considerable guidance" from those portions of this court's opinion in Wertheim I dealing with process claims 6-14 and 16-29, supra 541 F.2d at 266 et seq., 191 USPQ at 99 et seq. It further noted that the disclosure from Pfluger II had been "carried forward into the patent." The Pfluger II disclosure was then compared to the Pfluger I disclosure, which states in pertinent part (quoted by the board):

In accordance with the present invention the foregoing objectives are achieved with improved results along the lines indicated by:

(1) freezing a foam containing food or pharmaceutical solids in suspension and/or solution to convert the water content thereof to a crystalline state; and

(2) freeze drying the foamy mass thus created to a stable moisture content while maintaining the moisture thereof in a substantially solid state.

*531 In many applications such foaming can be considerably increased by concentrating the solution or suspension to a relatively high solids content prior to incorporation of air or other gas such as nitrogen therein by whipping. Although it is preferred that the foam be created in accordance with the present invention by whipping under atmospheric pressures and temperatures, the foam can also be created by other means such as inducing a superatmospheric pressure on the solution or suspension during agitation thereof (during which agitation extraneous gas such as nitrogen or carbon dioxide may be added) followed by sudden issuance of this solution or suspension from such a confined area of superatmospheric pressure to a reduced area of atmospheric or subatmospheric pressure such as occurs when the solution or suspension is caused to issue through an orifice or other suitable valve-operated aperture causing the food solids to foam under the influence of the pressure released. Other means for creating a foam involve the overt introduction to a solution or suspension of such means as dry ice, i. e., solid carbon dioxide in a suitable ground or particulate form, whereby carbon dioxide liberated upon subliming of the "dry ice" causes foaming of the solution or suspension to occur. Similarly, refrigerated air or nitrogen can be introduced to the solution or suspension to cause foaming thereof.

The foam preferably has a high overrun whereby the density of the solution or suspension is changed from 1.0 gm. per c.c. to between .1-.5 gms. per c.c.

Although Pfluger I was said to "not mention 'avoiding

evaporation' in connection with the foaming and freezing steps," the board found that this concept was expressed in the Pfluger prosecution as early as Pfluger II. Furthermore, it held that the avoidance of evaporative cooling was inherent in the procedure disclosed in Pfluger I, i. e., the creation of a foam at at least atmospheric pressure and the proscription against allowing the frozen foam to melt while being dried. On this basis, the board held that "the substance of the relevant disclosure in Pfluger I was carried forward into the patent."

The secondary references were held to properly establish the obviousness of "the degree of concentration" claimed in the Pfluger patent as of the filing of Pfluger I. Excerpts from both Sivetz and Flosdorf were quoted to demonstrate that concentrating aqueous coffee extracts above a 30% solids content was well known in the art. However, no distinction was made between concentrating extracts for foamed and non-foamed freeze-drying processes.

Reading the board opinion as a whole, it clearly appears that the obviousness rejection under <u>ss</u> <u>102(e)/103</u> was sustained on the basis of teachings which the board found in Pfluger I, read as though it were a proper prior art reference, taken with further suggestions gleaned from Sivetz and Flosdorf, the secondary references. The board said:

In conclusion, considering all the evidence, we hold that the Examiner properly relied on Sivetz and Flosdorf as establishing the obviousness of the degree of concentration required by the appealed claims in a process as taught by Pfluger.

Taken by itself, that statement does not show what teaching of Pfluger, out of all four applications, was meant, but the opinion makes clear it was talking about the 1961 Pfluger I application and more particularly, the one sentence therein, previously referred to, which stated:

In many applications such foaming can be considerably increased by concentrating the solution or suspension to a relatively high solids content prior to incorporation of air or other gas such as nitrogen therein by whipping.

OPINION

At the outset, we wish to set forth and characterize the exact nature of the rejection and its statutory basis. While the board stated the rejection to be based upon 35 U.S.C. s 103, we note that it is more properly viewed as a 35 U.S.C. s 102(e)/35 U.S.C. s 103

rejection. Because this distinction *532 is the focal point of our decision to reverse, a short discussion of the nature of this rejection follows.

I. ss 102(e)/103 Rejections

Section 102(e), a codification of the rule of Alexander Milburn Co. v. Davis-Bournonville Co., 270 U.S. 390, 46 S.Ct. 324, 70 L.Ed. 651 (1926), reads as follows:

A person shall be entitled to a patent unless

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent * * *.

In Milburn, a patent infringement suit, the court held that material disclosed but not claimed in a United States patent may be used as a reference to anticipate a later invention as of the date the reference application was filed, rather than the date the patent finally issued.

The plaintiff in that case sued for infringement of Whitford's patent, which had issued on June 4, 1912, after being applied for on March 4, 1911. One Clifford had filed an application for a patent on January 31, 1911, which "gave a complete and adequate description of the thing patented to Whitford but * * * did not claim it." A patent issued to Clifford on February 6, 1912. Whitford could not prove a date of invention prior to his application date and, thus, his date of invention was after the Clifford application date but before the date Clifford's patent issued.

Although Clifford's application was not a matter previously "known or used," nor a patent or a printed publication, the Supreme Court reasoned that "the delays of the Patent Office ought not to cut down the effect of what has been done." The Clifford application was thus held to be prior art against the Whitford patent as of the former's filing date.

The Supreme Court in <u>Hazeltine Research Inc. v. Brenner, Com'r, 382 U.S. 252, 86 S.Ct. 335, 15 L.Ed.2d 304, 147 USPO 429 (1965)</u>, subsequently held that Milburn and <u>s 102(e)</u> may be applied to determine what is "prior art" under the <u>s 103</u> requirement. <u>Section 103</u> states in relevant part that

A patent may not be obtained * * * if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. (Emphasis ours.) While nowhere in <u>Title 35</u> are the words "prior art" defined, the Senate and House Reports accompanying the 1952 Patent Act state:

(Section 103) refers to the difference between the subject matter sought to be patented and the prior art, meaning what was known before as described in Section 102. S.Rep.No.1979, 82d Cong., 2d Sess., U.S.Code Cong. & Admin.News at 2394, 2399. (The House Report No. 1923 is the same.)

Additionally, one draftsman of and the commentator on the 1952 Act, P. J. Federico, commented that:

The antecedent of the words "the prior art" * * * lies in the phrase "disclosed or described as set forth in Section 102" and hence these words refer to thematerial specified in Section 102 as the basis for comparison. Federico, Commentary On The New Patent Act, 35 USCA p. 1 at 20 (1954).

Commensurate with the Senate Report and Mr. Federico's commentary, we have held that the term "prior art" refers "to at least the statutory prior art material named in <u>s 102</u>." In re Yale, 52 CCPA 1668, 347 F.2d 995, 146 USPQ 400 (1965). See In re Harry, 51 CCPA 1541, 333 F.2d 920, 142 USPQ 164 (1964).

In Hazeltine, the court stated that earlier-filed applications for patents of another describing, although not necessarily claiming, the invention claimed in a later-filed application, are prior art under <u>s 102(e)</u> and are available for consideration in support of a <u>s 103</u> obviousness rejection of the later-filed application. See *533In re Bowers, 53 CCPA 1590, 359 F.2d 886, 149 USPQ 570 (1966). And, for purposes of both <u>s 102</u> and <u>s 103</u> analysis, they are prior art as of their filing dates.

In Hazeltine, Regis filed an application for patent on December 23, 1957. The examiner rejected the claims as obvious under <u>s 103</u> in view of the disclosures of two patents, Carlson and Wallace. Carlson was issued eight years earlier and was clearly a valid reference. Wallace, however, was pending at the time of Regis' application, and had been filed almost four years earlier, prompting Regis to argue that it was not "prior art" because its disclosures were secret and not known to the public. In dismissing this argument, the Supreme Court stated (382 U.S. p. 255, 86 S.Ct. p. 338):

Petitioners suggest * * * that the question in this case is not answered by mere reference to s 102(e), because in Milburn, which gave rise to that section, the co-pending applications described the same identical invention. But here the Regis invention is not precisely the same as that contained in the

Wallace patent, but is only made obvious by the Wallace patent in light of the Carlson patent. We agree with the Commissioner that this distinction is without significance here. While we think petitioners' argument with regard to s 102(e) is interesting, it provides no reason to depart from the plain holding and reasoning in the Milburn case. The basic reasoning upon which the Court decided the Milburn case applies equally well here. When Wallace filed his application, he had done what he could to add his disclosures to the prior art. The rest was up to the Patent Office. Had the Patent Office acted faster, had it issued Wallace's patent two months earlier, there would have been no question here. As Justice Holmes said in Milburn, "The delays of the patent office ought not to cut down the effect of what has been done." P. 401 (46 S.Ct. at p. 325).

[1] The ss 102(e)/103 rejection, thus, is one utilized where s 102(e) alone may fail because not every material limitation of the claimed invention is disclosed in the reference. That reference, referred to as "prior art" in s 103, may be combined with another to support an obviousness rejection. See In re Caveney, 55 CCPA 721, 386 F.2d 917, 155 USPO 681 (1967).

A different situation arises where, unlike Milburn or Hazeltine, the reference patent issues not after only one application, but after a series of applications. In other words, after permitting the use of a patent reference in both s 102(e) and ss 102(e)/103 rejections as of the reference filing date, the next question confronting the courts was what filing date was to be accorded a reference patent which issues after a series of applications. How far back can one extend the effective date of a reference patent as "prior art" in such a case?

II. 102(e) and Continuation Applications
In In re Lund, 54 CCPA 1361, 376 F.2d 982, 153
USPO 625 (1967), this court was called upon to decide whether a certain compound disclosed in Example 2 of an application filed by Margerison on September 29, 1958, was available as prior art as of that filing date to reject Lund's claims, which were presented in an application filed almost a year later. Although Margerison abandoned the application, he had filed a continuation-in-part application, without Example 2, which resulted in issuance of the reference patent. The court stated it to be

* * * well settled that where a patent purports on its face to be a "continuation-in-part" of a prior application, the continuation-in-part application is entitled to the filing date of the parent application as to all subject matter carried over into it from the parent application, whether for purposes of obtaining a patent or subsequently utilizing the patent disclosure as evidence to defeat another's right to a patent. (Emphasis in original.)

In deciding what had been "carried over," the court held that merely designating an application as a continuation-in-part was not sufficient to incorporate by reference the disclosure of the abandoned application into the patent disclosure, "as if fully set out therein." The court concluded that:

*534 It seems to us that the sine qua non of s 102(e) and the Milburn case is that, consistent with the gain to the public which the patent laws mean to secure, a patent must issue which contains, explicitly or implicitly, the description of an invention which is to be relied on to defeat a later inventor's patent rights. It does not appear that the patentee here has done "all that he could do to make his description public," Milburn, supra, for the language Margerison employs is not sufficient to incorporate the description of his earlier application into the patent and the description which the Patent Office relies upon appears only in the earlier application. (Emphasis in original.)

In In re Klesper, 55 CCPA 1264, 397 F.2d 882, 158 USPQ 256 (1968), the PTO rejected Klesper's claims as fully anticipated by a Frost patent under s 102(e) because Klesper could not antedate the effective date of the reference. The issue before this court was what that effective date was. Frost and Klesper had filed applications for patent on October 20, 1955, and September 18, 1956, respectively. Frost then filed a continuation-in-part application on April 1, 1959, which application culminated in the issuance of a patent on January 8, 1963, containing the 1959 disclosure. On January 6, 1964, Klesper filed a continuation-in-part application. The PTO gave the Frost patent the benefit of its parent filing date, October 20, 1955.

The court stated that <u>s 102(e)</u> was a codification of the historical treatment of a U. S. patent disclosure "as prior art as of the filing date of the earliest U. S. application to which the patent is entitled, provided the disclosure was contained in substance in the said earliest application." Thus, the determinative question became whether or not the subject matter of the appealed claims was disclosed both in the abandoned application and in the patent. The court agreed with the PTO conclusion that:

* * * Frost's abandoned application discloses the subject matter of the appealed claims and it is

admitted that that subject matter is contained in the reference patent. It follows that it was carried forward and that the effective date of the patent as a prior art reference against the appealed claims under section 102(e) is October 20, 1955, which antedates appellant.

The Klesper case thus dealt with the dating back of a patent reference to gain the benefit of an earlier filing date. Lund was not so concerned, however, and considered only whether a disclosure appearing only in an abandoned application was to be regarded as prior art under <u>s 102(e)</u>. Both cases involved rejections based upon <u>s 102(e)</u> alone.

We now come to the situation in the instant case, one which we believe has not heretofore been before us. [FN2] What patent disclosure, or portion thereof, which has been "carried over" through a chain of applications, may be traced back to an earlier application and given its effective date, and then combined with a secondary reference to reject later filed claims under ss 102(e)/103?

FN2. A similar fact situation may have been before this court in In re Switzer, 35 CCPA 1013, 1019, 166 F.2d 827, 831, 77 USPO 156, 159 (1948). However, because the reasoning of the court is unclear, the opinion lends no aid to resolution of the dispute at hand.

III. Continuing Applications and Rejections Under ss 102(e)/103

We begin by noting the factual differences between this case and Hazeltine. In Hazeltine the Court utilized all of the reference patent disclosure as prior art. But because that disclosure was insufficient to support a rejection under s 102(e) alone, the Court approved combining it with a second reference for purposes of determining obviousness. In this case, utilization of all the reference patent disclosure would, of course, suffice to support a rejection, if its date is early enough, because Wertheim copied the Pfluger patent claims for interference. That disclosure, however, cannot be given an effective filing date early enough to antedate the Wertheim Swiss filing date. See Wertheim I. The PTO, *535 therefore, has abstracted a part of the entire patent disclosure set forth in a Pfluger application dated prior to the Wertheim Swiss filing date, found it "carried over" into the patent, and, on the supposed authority of

Lund and Hazeltine, used it in combination with a second reference to reject the Wertheim claims as obvious. For reasons which follow, we hold that was erroneous.

A. The Rejection

In the instant case, the examiner relied on Pfluger patent 3,482,990 and the Sivetz et al. publication and rejected the claims "under 35 U.S.C. s 102(e) and/or s 103 as unpatentable over Pfluger * * * in view of Sivetz et al," saying that "Pfluger is entitled to the benefit of" Pfluger's 1961 filing date. The examiner also said, "Note 35 U.S.C. 120," but made no specific application thereof. Without addressing the relevance of this statute, the board said:

We will not affirm the rejection based solely on <u>35</u> <u>U.S.C.</u> <u>102(e)</u>, although we recognize that the Pfluger disclosure is available as a reference under the provisions of <u>35 U.S.C.</u> <u>102(e)</u>.

Here one of the contested issues is whether the principal reference discloses concentrating the extract to the specific "higher solids level of between 35% and 60% soluble solids." Secondary references may well establish the obviousness of the quoted figures, but in that case the rejection is under 35 U.S.C. 103 rather than 35 U.S.C. 102. (Emphasis ours.)

The board was there distinguishing In re Samour, 571 F.2d 559, 197 USPO 1 (CCPA 1978), wherein this court said, "every material element of the claims was disclosed in the principal reference." It thus appears that the board was pointing out, backhandedly, that every material element of the Wertheim-Pfluger claims was not disclosed in the "principal reference."

[2] It is of further interest to consider what the board meant in the above quotation by "principal reference" in referring to the instant case. The examiner's "principal reference" was the Pfluger patent; but there is no question that it discloses every element of the claims on appeal, which claims were copied by Wertheim from that patent. Therefore, the board could not have been referring to the Pfluger patent as the "principal reference" and the only possible deduction is that it was referring to the Pfluger I application. Therein lies its first error, for an abandoned application by itself can never be a reference. In any event, on the basis of the failure of disclosure in Pfluger I noted above, the board refused to sustain the rejection on \underline{s} 102(e) alone, and affirmed only the rejection of the claimed invention as obvious under s 103.

B. Section 103

awarded the benefit of the Pfluger I filing date. [FN3]

[3] In every case, "the invention" referred to in \underline{s} 103 is nothing more nor less than the subject matter being claimed by the applicant, which is the starting point of all inquiry about obviousness. Claim 44, the independent claim at bar, reads:

An improved process for minimising (sic) loss of volatiles during freeze- drying of coffee extract which comprises obtaining coffee extract, concentrating said extract to a higher solids level of between 35% and 60% soluble solids, foaming said concentrated extract to a substantial overrun by injection of a gas into said extract at at least atmospheric pressure to thereby avoid evaporative cooling due to evaporation of water in said extract during said foaming, freezing said foam to below its eutectic point at at least atmospheric pressure while avoiding evaporative cooling, and freeze-drying said extract at below the eutectic temperature of said extract. (Emphasis ours.)

Claim 37 merely adds the limitation that the overrun density be between 0.4 to 0.8 gm/cc, and claim 38 adds a different limitation, freeze drying at a pressure of about 150 to 175 microns.

Looking now to the basis of the s 103 rejection, regardless of what may have been in the minds of the board members, the principal reference to support this rejection *536 is Pfluger patent No. 3,482,990. Does it show that all or part of the claimed invention was in the "prior art"? Of course, it shows all of the claimed invention. The claims were copied from it by Wertheim and if it did not contain a complete description of the claimed invention it would not have been issued by the PTO. It issued, however, on December 9, 1969, and Wertheim has already been held entitled to an invention date at least as early as April 2, 1965, so what evidence does the patent contain that the patent disclosure was "prior art" with respect to Wertheim? As a patent or as a publication, the answer, of course, is none. How, then, does it function as a s 103 "reference"? It is at this point that the PTO invokes \underline{s} 102(e) on the authority of Hazeltine and makes the argument next to be described.

C. <u>Sections 102(e)</u> and <u>120</u>

We are asked by the PTO to apply the "carried over" principle set forth in Klesper to the present ss 102(e)/103 rejection. Specifically, the solicitor argues that since this court said in Wertheim I that Pfluger II was "carried forward" into the Pfluger patent, and Pfluger I discloses essentially the same invention as Pfluger II, the Pfluger reference patent must be

FN3. In Wertheim I, this court apparently relied upon Lund and, with regard to "non-interference" claims not now in issue, stated that, "we will apply as prior art under s 102(e) * * * those portions of the Pfluger patent disclosure that were carried forward from (Pfluger II)." 541 F.2d at 266, 191 USPO at 99.

In this case, unlike Wertheim I, the board and the examiner rely upon the Pfluger I filing date, not the Pfluger II filing date. Therefore, we need not, and do not, reach any conclusions as to whether the latter date is effective against either the present "interference" claims or the "non-interference" claims of Wertheim I. We note, however, that the court in Wertheim I evidently did not utilize the principles of law we herein announce, which include a modification of the Lund dictum. See note 4 and accompanying text infra.

In responding to this argument, we first note that the Pfluger patent issued after a series of applications, the initial one (I), two continuation-in-part applications (II and III), and a continuation application (IV). Let us assume that Pfluger I disclosed subject matter A. Because two continuation-in-part applications followed, II may be said to contain subject matter AB, B representing new matter, and III may be said to contain ABC, C representing the additional new matter in that application. Continuation application IV, of course, also contains subject matter ABC.

Instead of determining what filing date the Pfluger patent was entitled to as a s 102(e) reference for purposes of the ss 102(e)/103 rejection, however, the board relied upon the language in Lund, that a disclosure which is "carried over" into the patent from previous applications may be used to defeat the patent rights of another inventor. In other words, rather than examining the Pfluger patent in the light of ss 120 and 112, it reached back to Pfluger I and retrieved A, found it "carried over" into the patent and combined it with a secondary reference to find the Wertheim invention obvious.

[4] Although this court apparently embraced this procedure in Wertheim I, such an approach in a situation where there are continuation-in-part

applications ignores the rationale behind the Supreme Court decisions in Milburn and Hazeltine that "but for" the delays in the Patent Office, the patent would have earlier issued and would have been prior art known to the public. The patent disclosure in Milburn was treated as prior art as of its filing date because at the time the application was filed in the Patent Office the inventor was presumed to have disclosed an invention which, but for the delays inherent in prosecution, would have been disclosed to the public on the filing date. A continuation-in-part application, by definition, adds new matter to the parent application previously filed. Thus, the type of new matter added must be inquired into, for if it is critical to the patentability of the claimed invention, a patent could not have issued on the earlier filed application and the theory of Patent Office delay has no application.

*537 [5] Additionally, it is at this point in the analysis that s 120 enters the picture, for the phrase in s 102(e), "on an application for patent," necessarily invokes s 120 rights of priority for prior co-pending applications. If, for example, the PTO wishes to utilize against an applicant a part of that patent disclosure found in an application filed earlier than the date of the application which became the patent, it must demonstrate that the earlier-filed application contains ss 1 20/112 support for the invention claimed in the reference patent. For if a patent could not theoretically have issued the day the application was filed, it is not entitled to be used against another as "secret prior art," the rationale of Milburn being inapplicable, as noted above. In other words, we will extend the "secret prior art" doctrine of Milburn and Hazeltine only as far as we are required to do so by the logic of those cases.

Initially then, the question becomes the familiar one of which filing date the Pfluger patent is entitled to for various purposes, including its effectiveness as a <u>s 102(e)</u> reference under <u>s 103</u> evidencing "prior art." Lund, supra. It is clear that it cannot be used as a reference under <u>s 102(e)</u> alone against the Wertheim invention as of the date of a Pfluger application which does not describe the Wertheim invention, as claimed. See <u>In re Smith</u>, 59 CCPA 1025, 458 F.2d 1389, 173 USPQ 679 (1972).

The conditions under which a filing date earlier than that of the last in a series of applications on which a patent issues may be accorded to a patent with respect to any given claimed subject matter are clearly set forth in <u>s 120</u>:

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States by the same inventor shall have the same effect, as to such invention, as though filed on the date of the prior application * * *. (Emphasis ours.)

We omit the balance of the section because there is no question here about compliance with its terms. The first paragraph of \underline{s} 112 reads:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. (Emphasis ours.)

We emphasize that the above noted statutes, ss 102(e), 120, and 112, speak with reference to some specific claimed subject matter by use of the terms emphasized. It is axiomatic in patent law that questions of description, disclosure, enablement, anticipation, and obviousness can only be discussed with reference to a specific claim which identifies "the invention" referred to in the statutes.

Thus, the determinative question here is whether the invention claimed in the Pfluger patent finds a supporting disclosure in compliance with \underline{s} 112, as required by \underline{s} 120, in the 1961 Pfluger I application so as to entitle that invention in the Pfluger patent, as "prior art," to the filing date of Pfluger I. Without such support, the invention, and its accompanying disclosure, cannot be regarded as prior art as of that filing date.

As previously noted, new matter can add material limitations which transform an unpatentable invention, when viewed as a whole against the prior art, into a patentable one. A continuation-in-part application, unlike a continuation application, does not necessarily insure that all critical aspects of the later disclosure were present in the parent. Thus, in a situation such as this, only an application disclosing the patentable invention before the addition of new matter, which disclosure is carried over into the patent, can be relied upon to give a reference disclosure the benefit of its filing date for the purpose of supporting a ss 102(e)/103 rejection.

*538 D. The Pfluger I Disclosure

Although the board and the examiner have tacitly, if

not expressly, admitted that Pfluger I does not disclose the claimed invention indeed, that fact can be implied from the \underline{s} 103 rejection for obviousness as well as from the board's reversal of the rejection based on \underline{s} 102(e) alone we here devote some necessary discussion to this factual issue.

In the course of answering appellants' argument that they had been put into a situation where they could not contest priority with Pfluger or take advantage of <u>37 CFR 1.131</u>, the board said:

This situation arises because, under 35 U.S.C. 102(e), the Pfluger patent has an effective date, with respect to the relevant subject matter, of March 24, 1961. Appellants have offered no evidence to antedate said date.

The only date the Pfluger patent has under \underline{s} 102(e) is February 10, 1969, the filing date of Pfluger IV, the application on which the patent issued. Any earlier U. S. filing date for the patent necessarily depends on further compliance with $\underline{s}\underline{s}$ 120 and $\underline{1}\underline{1}\underline{2}$. The board appears to have assumed the existence of the very point at issue here whether the patent reference is entitled to a March 24, 1961, filing date.

We take note of two claim limitations missing from Pfluger I but present in the Pfluger patent which answer the question of whether to award the 1961 filing date to the s 102(e) reference patent disclosure. Pfluger I did not expressly disclose either concentrating the coffee extract to a 35% to 60% solids content, or avoiding evaporative cooling during the foaming and freezing steps. If either limitation, later added as new matter, resulted in the disclosure of a patentable invention for the first time, it is relevant to our determination of whether the Pfluger patent receives the benefit of the Pfluger I filing date.

The board did not "attach any significance" to the absence of express language disclosing the avoidance of evaporative cooling. Since the Pfluger I application disclosed gas injection into the extract "at at least atmospheric pressure," the board held that the above concept was inherently disclosed in the Pfluger I method.

Moreover, the board gave little weight to the addition of a solids content range in Pfluger III. Even though the examples in Pfluger I did not illustrate concentrating coffee extracts above 30%, the general statement in Pfluger I about concentrating extracts was said not to be limited in scope to the specific examples. Thus, the board apparently did not find either of the above claim

limitations to be new matter, much less relevant new matter.

A closer examination of the Pfluger file history reveals that the above limitations were relevant, indeed, critical new matter. From Pfluger II on, the patentee argued with the examiner over that feature of his process which he believed made the invention patentable the avoidance of evaporative cooling. However, it was not until after the filing of Pfluger III that the first allowance of claims occurred. There the patentee successfully distinguished the prior art by expressly stating the conditions under which such cooling is avoided. Both at least a 35% solids content and foaming under "conditions which avoid the evaporation of water" were allegedly necessary for allowance. It was the combination of these steps, and others, which was held to be a patentable invention and deemed allowable by the examiner in Pfluger III. In fact, during the prosecution of Pfluger IV, the examiner required that Pfluger specify the minimum level of concentration for the coffee extract at least 35%.

The board erred in ruling that since "the substance of the relevant disclosure in Pfluger I was carried forward into the patent," that same disclosure in the reference patent was entitled to the Pfluger I filing date, even though the entire patent was not. While some of the reference patent disclosure can be traced to Pfluger I, such portions of the original disclosure cannot be found "carried over" for the purpose of awarding filing dates, unless that disclosure constituted a full, clear, concise and exact description in accordance with s 112, first *539 paragraph, of the invention claimed in the reference patent, else the application could not have matured into a patent, within the Milburn s 102(e) rationale, to be "prior art" under s 103.

[6] The two claim limitations of the reference patent missing from Pfluger I were a necessary part of the only patentable invention ever set forth in the Pfluger file history. These limitations, however, were neither expressly nor inherently part of the original Pfluger disclosure. Absent these steps, the Pfluger I filing date cannot be accorded to the Pfluger patent reference. Without that date, the reference does not antedate Wertheim's alleged actual reduction to practice and cannot be combined with another reference to support a \$\frac{103}{2}\$ rejection.

[7] To look at it another way, without the benefit of the Pfluger I filing date, that part of the reference patent disclosure relied upon cannot be said to have been incipient public knowledge as of that date "but for" the

delays of the Patent and Trademark Office, under the Milburn rationale. Here, it cannot be said to have been "carried over" into the reference patent for purposes of defeating another's application for patent under \underline{ss} $\underline{102(e)/103}$.

The dictum in Lund, [FN4] supra, that

<u>FN4.</u> It was dictum because the only relevant holding in Lund was that matter not carried over could not be used as evidence of prior art. The quoted passage in the text was not necessary to the decision.

* * * the continuation-in-part application is entitled to the filing date of the parent application as to all subject matter carried over into it from the parent application * * * for purposes of * * * utilizing the patent disclosure as evidence to defeat another's right to a patent * * (emphasis in original)

is hereby modified to further include the requirement that the application, the filing date of which is needed to make a rejection, must disclose, pursuant to ss 1 20/112, the invention claimed in the reference patent. Where continuation-in-part applications are involved, the logic of the Milburn holding as to secret prior art would otherwise be inapplicable. Without the presence of a patentable invention, no patent could issue "but for the delays of" the PTO.

Conclusion

Since the patent disclosure used in the present rejection is not effective as a reference as of the Pfluger I filing date, the decision of the board affirming the <u>ss</u> 102(e)/103 rejection of claims 37, 38, and 44 is reversed.

REVERSED.

646 F.2d 527, 209 U.S.P.Q. 554

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